



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,484	01/15/2004	Kevin Curtis Griffin	ROC920030367US1	6194
30206	7590	02/15/2006		
IBM CORPORATION ROCHESTER IP LAW DEPT. 917 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			EXAMINER BARTON, JONATHAN A	
			ART UNIT 2186	PAPER NUMBER
DATE MAILED: 02/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/758,484	Applicant(s) GRIFFIN ET AL.	
	Examiner Jonathan Barton	Art Unit 2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- a. Claim 12 recites the limitation "the subsequent update" in lines 8 and 9.

There is insufficient antecedent basis for this limitation in the claim.

- b. Claim 13 recites the limitation "the backup system" in lines 14-15. There is insufficient antecedent basis for this limitation in the claim.

- c. Claim 18 recites the limitation "the backup system" and "the primary system" in lines 9 and 10. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- d. Claims 32 and 34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A "signal bearing medium" is too broad of language to ensure that such a medium will be a disc or magnetic storage device or some form of tangible storage medium.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 6-9, 12-14, 16-26 and 29-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Burton et al (US 2005/0091391).

a. As for claim 1 Burton discloses

i. Creating a group including a plurality of update requests (Par. 39 Lines 8-13, Par. 40);

ii. Concurrently completing the plurality of update requests of the group (Par. 43); and

iii. After completing the plurality of update requests, completing a subsequent update request (Par 59 Lines 6-9, Par. 41).

b. As for claim 17 Burton discloses

iv. A processor (Par. 29); and

v. Program code communicating with the processor configured to process a plurality of update requests by initiating creation of a group (Par. 40)

- vi. including a plurality of update requests (Par. 39 Lines 5-6)
 - vii. having no order dependency (Par. 39 Lines 9-13, Par. 43),
 - viii. concurrently initiating completion of the plurality of update requests (Par. 74 Lines 19-24), and
 - ix. initiating completion of a subsequent update request (Par 59 Lines 6-9, Par. 41).
- c. As for claim 2 and 19 Burton discloses
 - x. Completing a subsequent update request includes creating a subsequent group (Par. 40-43).
- d. As for claim 3 and 20 Burton discloses
 - xi. Creating the group further includes creating a group that includes a plurality of requests initiated at a plurality of applications (Par. 28 Lines 3-6).
- e. As for claim 4 and 21 Burton discloses
 - xii. Creating the group further includes updating a count associated with a number of the plurality of update requests (Par. 49).
- f. As for claim 6 Burton discloses
 - xiii. Creating the group further includes updating a status indicative of whether the group is active (Par. 74 Lines 13-17).
- g. As for claim 7 and 24 Burton discloses
 - xiv. Creating the group further includes assigning a group number to an update request of the plurality of update requests (Par. 40).

- h. As for claim 8 and 25 Burton discloses
 - xv. Completing the plurality of update requests further includes issuing an update request of the plurality of update requests (Par. 59 Lines 1-6).
- i. As for claim 9 and 26 Burton discloses
 - xvi. Creating the group further includes reading a group number from an update request of the plurality of update requests (Par. 61 Lines 4-11).
- j. As for claim 12 and 30 Burton discloses
 - xvii. Creating the group, completing the update requests and completing the subsequent update further comprises creating the group, completing the update requests and completing the subsequent update on a primary system (Par. 39, 40).
- k. As for claim 13 and 29 Burton discloses
 - xviii. Completing the update requests and completing the subsequent update further comprises creating the group completing the update requests and completing the subsequent update on the backup system (Par. 57).
- l. As for claim 14 Burton discloses
 - xix. Synchronously processing a plurality of groups of update requests (Par. 38 Lines 1-18); and
 - xx. Asynchronously processing the update requests in each group (Par. 38 Lines 18-21).
- m. As for claim 16 Burton discloses

- xxi. Processing the groups further includes assigning a group number to an update request of the plurality of update requests (Par. 40).
- n. As for claim 18 Burton discloses
 - xxii. The backup system is peripheral from the primary system (Par. 28 Lines 1-3).
- o. As for claim 23 Burton discloses
 - xxiii. A memory accessible to the program code (Par. 30, Par. 60 Lines 1-5).
- p. As for claim 31 Burton discloses
 - xxiv. A processor (Par. 29);
 - xxv. Program code in communication with the processor configured to update data at a backup system that tracks updates made to a primary system by initiating the synchronous processing a plurality of groups of update requests (Par. 38 Lines 1-18) and
 - xxvi. initiating the asynchronous processing the update requests in each group (Par. 38 Lines 18-21).
- q. As for claim 32 Burton discloses
 - xxvii. Program code in communication with at least one of a primary and backup system (Par. 28),
 - xxviii. The program code configured to initiate creation of a group including a plurality of update requests (Par. 39 Lines 8-13, Par. 40) and

- xxix. To concurrently initiate completion of the plurality of update requests (Par. 43), and
- xxx. After initiating the completion of the plurality of update requests, the program code being further the program code being further configured to initiate completion of a subsequent update request (Par 59 Lines 6-9, Par. 41); and
- xxxi. A signal bearing medium bearing the program code (Par. 28).
- r. As for claim 33 and 35 Burton discloses
 - xxxii. The signal bearing medium includes at least one of a recordable medium and a transmission-type medium (Par. 28).
- s. As for claim 34 Burton discloses
 - xxxiii. Program code in communication with at least one of a primary and backup system (Par. 28),
 - xxxiv. The program code configured to initiate synchronously processing a plurality of groups of update requests (Par. 38 Lines 1-18),
 - xxxv. And to initiate asynchronously processing the update requests in each group (Par. 38 Lines 18-21); and
 - xxxvi. A signal bearing medium bearing the program code (Par. 28).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burton et al (US 2005/0091391).

t. As for claims 5 and 22 Burton discloses

xxxvii. Selectively activating the method of claim 1. *There is no point where Burton specifically discloses this, but it is readily obvious that the system must be started at some point in time (this point in time is selected by something or someone) in order to operate at all, and in doing so would be activating the system and method in the manner claimed.*

4. Claims 10, 11, 15, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burton et al (US 2005/0091391) in view of Souder et al. (US 5,937,414).

u. As for claims 10, 15 and 27 Burton discloses the depended upon claims 1, 14 and 17 respectively but fails to disclose the following limitation which is taught by Souder:

xxxviii. Completing the plurality of update requests further includes holding the subsequent update request (Souder Col. 6 Line 66 – Col. 7 Line 2).

xxxix. It would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the update holding taught by Souder with the mirroring system disclosed by Burton because both

systems utilize both synchronous and asynchronous mirroring techniques and the update holding further prevents the corruption of data.

- v. As for claims 11 and 28 Souder et al. teach
 - xl. Completing the subsequent update request further includes releasing a hold on the subsequent update request (Col. 7 Lines 2-9).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Barton whose telephone number is 571-272-8157. The examiner can normally be reached on Monday - Friday 8:30 - 5:00.

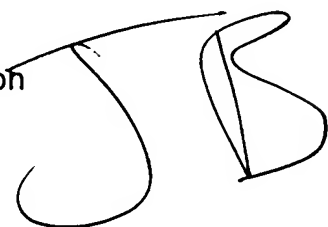
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MATTHEW D. ANDERSON
PRIMARY EXAMINER

Jonathan Barton
Examiner
Art Unit 2186



Application/Control Number: 10/758,484
Art Unit: 2186

Page 10

JB